

A NEW CLOUD-FOREST *ERYNGIUM* FROM CHIAPAS, MEXICO

A new polyploid species, *Eryngium strotheri*, is described from the high-montane cloud forest of Chiapas, southern Mexico.

Eryngium strotheri Constance & Affolter, sp. nov. TYPE: Mexico. Chiapas: summit of Cerro Mozotal, E Sierra Madre, 15 Oct. 1980, *John*

L. Strother s.n. (C-2189) (holotype, UC; isotypes to be distributed to principal herbaria). Figure 1.

Plantae crassae caulibus florentibus singularibus foliosis; folia virides non-disticha \pm ensiformia lineari-lanceolata parallelo-nervata spinoso-lobata lobis cum spinula accessoria prominente munitis; inflorescentia viridis cymoso-

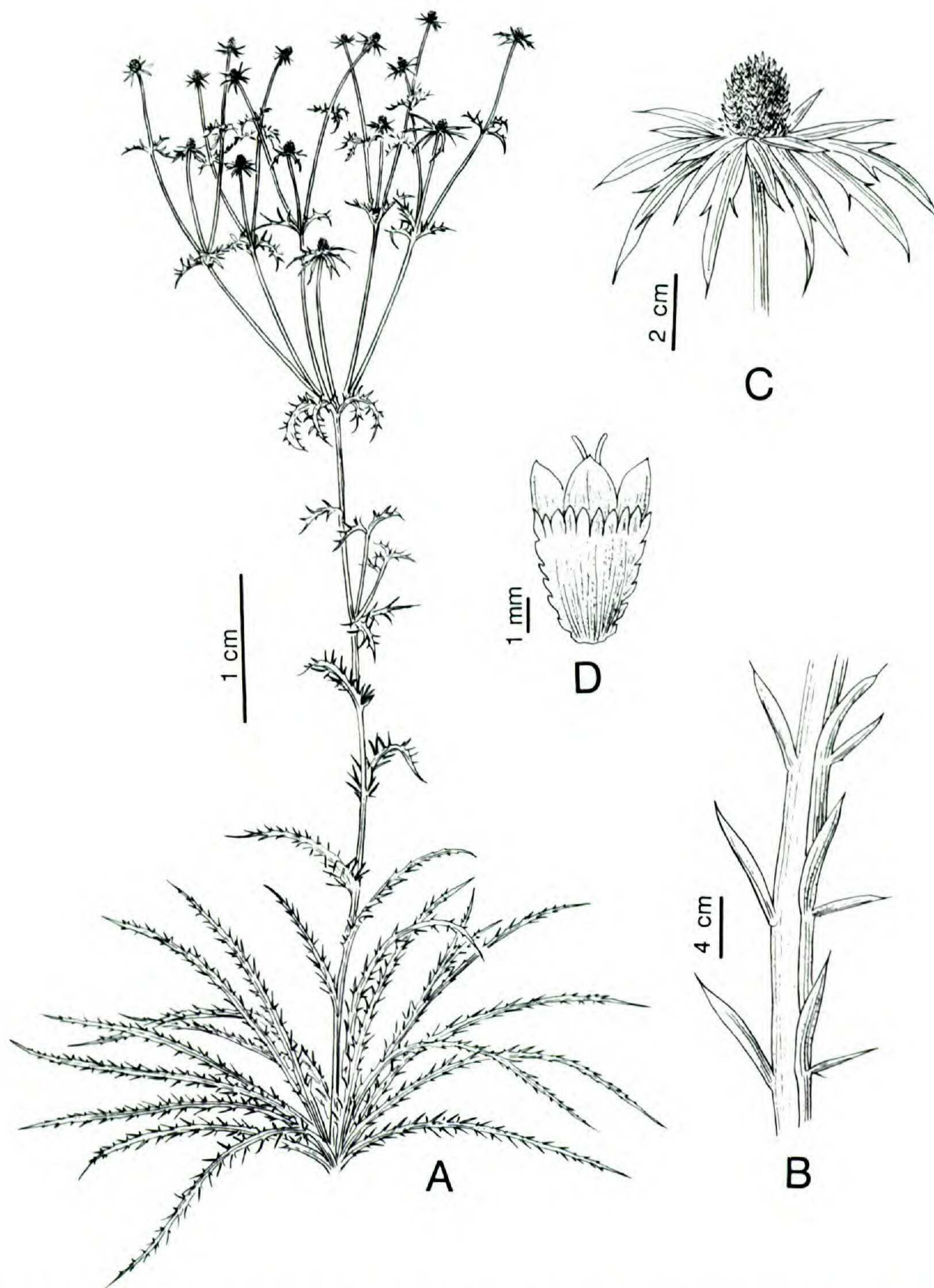


FIGURE 1. *Eryngium strotheri*.—A. Habit.—B. Detail of basal foliage leaf.—C. Head, with involucre.—D. External view of mericarp showing sepals and fruit squamulae. (All from type collection.)

paniculata; capitula subnumerosa magna viridi-alba hemispherico-ovoidea glabra; bracteae involucrales distinctae biseriatae lateraliter imbricatae integrae vel spinoso-dentatae virides capitulo longiores; fructus cuneato-ovoideus squamatus alatus dorsi superficie nuda.

Plants perennial, stout, erect, 0.8–1.2 m tall, from a short vertical caudex bearing fascicled fibrous roots, the flowering stem solitary, leafy; basal leaves rosulate, spreading-ascending, nondistichous, \pm ensiform, linear-lanceolate, 30–40 cm long, 2–5 cm broad (including lobes, 0.5–1 cm without lobes), densely spinose-lobed, the lobes linear to linear-lanceolate, spine-tipped, 1–2 cm long, spreading, mostly with an auxiliary axillary spinule, some as large as the lobes and giving a double-lobed appearance, the blade rigid-attenuate at apex, strongly caniculate, slightly tapering at base into a naked sheath no broader than the blade and 3–4 cm long, deep green, the venation strictly parallel except for veins entering the marginal lobes; cauline leaves similar to the basal, lanceolate to ovate, very coarsely and densely spinose-lobed with larger lobes, alternate below, whorled or opposite beneath the terminal inflorescence, subamplexicaul, spreading to reflexed; inflorescence paniculately cymose, ending in a large terminal cluster of ca. 5 basically trichotomous flowering branches surrounding and usually exceeding the terminal peduncle, without fertile axillary branches (?), conspicuously bracteate; heads greenish white, hemispheric-ovoid, 15–20 cm diam., pedunculate, many-flowered; involucral bracts 12–30, linear-lanceolate, 2.5–4.5 cm long, 2–7 mm broad, pungent, definitely in more than one series and imbricated laterally, entire or the larger outer ones with 2–5 spinose teeth, green on both surfaces, spreading, exceeding the heads; bractlets lanceolate-subulate, ca. 5 mm long, exceeding the fruit, a coma lacking; sepals broadly ovate, acute, apiculate, 1.5–2 mm long; petals oblong, ca. 1.5 mm long, the inflexed apex about equaling the limb, entire (?); styles 2–2.5 mm long, longer than the calyx; fruit cuneate ovoid, 4–5 mm long (including calyx lobes), 3 mm broad,

compressed dorsally, provided with a row of flattened ovate-lanceolate scales below the calyx, the marginal wings lobed, the dorsal surface naked; chromosome number $n = 24$; cotyledons oval, 3–5 mm long.

Paratype. MEXICO. CHIAPAS: steep slope, evergreen cloud forest with *Quercus*, *Pinus*, *Abies*, *Drimys*, *Photinia*, *Clethra*, *Cornus*, and *Symplocos* on the N & W slopes of the Cerro Mozotal below the microwave tower along the road from Huixtla to El Porvenir and Siltepec, Mpio. Motozintla, 3,000 m, 28 June 1972, D. E. Breedlove 25,829 (DS).

Clearly a member of sect. *Spinescentia*, *Eryngium strotheri* appears to combine the conspicuous involucre of *E. involucratum* Coult. & Rose with the branching inflorescence of *E. tzeltal* Constance and the foliage of *E. guatemalense* Hemsley. Indeed, the Strother material, which has been grown at Berkeley for seven years, was obtained in a generous attempt to fulfill the senior author's request for "seed" of *E. tzeltal*. The species of this group are all polyploid (4–9-ploid) so far as known and also strikingly variable. They may likely be capable of exchanging genes or even genomes at a polyploid level, which could account for the variability and their taxonomic complexity. The intricate interrelationships require further study in the field and garden.

The illustration was designed and executed by Charlotte Mentges Hannan.

LITERATURE CITED

WOLFF, H. 1913. In Engler, *Das Pflanzenr.* 61(4228): 106–271.

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